ELSEVIER

BioSystems 39 (1996) 279

BioSystems

Author index

Volume 39 (1996)

Acerenza, L. 39, 109
Almagro, J.C. 39, 77
Asselmeyer, T. 39, 63
Atamas, S.P. 39, 143
Av-Ron, E. 39, 241

Baskaran, S. 39, 135
Billard, E.A. 39, 93
Bonabeau, E. 39, 25
Brittain, A. 39, 135
Burgos, J.D. 39, 19, 227

Davey, H.M. 39, 43
Davey, C.L. 39, 43
De la Fuente, I.M. 39, 87
de la Mora-Basáñez, C.R. 39, 117
Despa, S.-I. 39, 233
Di Giulio, M. 39, 159

Ebeling, W. 39, 63
Edmonds, A.N. 39, 43
English, T.M. 39, 3
Eremeev, N.L. 39, 35

Fiala, J. 39, 127
Fukuyama, Y. 39, 173

Gotoh, S. 39, 173

Hirayama, H. 39, 173

Insinna, E.M. 39, 187

Jiménez-Montaño, M.A. 39, 117

Kawai, N. 39, 173
Kazanskaya, N.F. 39, 35
Kell, D.B. 39, 43

Lara-Ochoa, F. 39, 77
Lee, A.W. 39, 43
Lenbury, Y. 39, 251

Martinez, L. 39, 87
Matsos, H.C. 39, 135
Mendez, I. 39, 77
Moreno-Tovar, P. 39, 227
Mukherjee, D. 39, 153

Noever, D.A. 39, 135

Obenhuber, D. 39, 135
Ojima, H. 39, 173

Pokorny, J. 39, 127
Pöschel, T. 39, 117

Ray, S. 39, 153
Rosé, H. 39, 63
Roy, A.B. 39, 153

Salomon, R. 39, 263
Satarić, M.V. 39, 127

Tuszynski, J. 39, 18

Varfolomeyev, S.D. 39, 35
Vargas-Madrazo, E. 39, 77
Veguillas, J. 39, 87
Vibert, J.-F. 39, 241

Woodward, A.M. 39, 43

Yoshii, K. 39, 173

Žakula, R.B. 39, 127
Zaborski, P. 39, 187
Zeković, S. 39, 127

ELSEVIER

BioSystems 39 (1996) 281–284

BioSystems

Subject index

Volume 39 (1996)

Albedo and radiation effects; Variable biome; Genetic algorithm; Greenhouse effect; Temperature balance **39**, 135

Aminoacyl-tRNA synthetases; Peptide antibiotics; Antique evolutionary relationships; RNA world; Thioester world; Origin of life **39**, 159

Antique evolutionary relationships; Peptide antibiotics; Aminoacyl-tRNA synthetases; RNA world; Thioester world; Origin of life **39**, 159

ATPase activation; Microtubules; Cytoskeleton; Electron transfer; Conformational changes; Ciliary beating; Intracellular transport; Protozoan; *Euglena gracilis*; Vertebrate photoreceptors **39**, 187

Biocomputers; Evolution of metabolism; Metabolic design; Sensitivity analysis **39**, 109

Biological rhythms; Chaos; Oscillatory enzymes; Dissipative structures; Cell behavior **39**, 87

Biomass estimation; Dielectric spectroscopy; Cellular growth rate; Chaos; Non-linear prediction; Control **39**, 43

Branching process; Idiotypic network; Random graph; Random matrix theory; Subcritical reorganizations **39**, 25

Calcium oscillations; Membrane potential; K+ channels; Cell activation **39**, 233

Cell activation; Membrane potential; Calcium oscillations; K+ channels **39**, 233

Cell behavior; Chaos; Biological rhythms; Oscillatory enzymes; Dissipative structures **39**, 87

Cellular growth rate; Dielectric spectroscopy; Biomass estimation; Chaos; Non-linear prediction; Control **39**, 43

Chaos; Biological rhythms; Oscillatory enzymes; Dissipative structures; Cell behavior **39**, 87

Chaos; Dielectric spectroscopy; Biomass estimation; Cellular growth rate; Non-linear prediction; Control **39**, 43

Ciliary beating; Microtubules; Cytoskeleton; Electron transfer; ATPase activation; Conformational changes; Intracellular transport; Protozoan; *Euglena gracilis*; Vertebrate photoreceptors **39**, 187

Coevolutionary dynamics; Evolutionarly stable strategies; Population dynamics; Stochastic games **39**, 93

Competition; Selective system; Self-organization; Degenerate recognition; Computer modeling **39**, 143

Complement; Sequential Activation; Stability; Controllability; Optimization **39**, 173

Computer modeling; Selective system; Self-organization; Degenerate recognition; Competition **39**, 143

Conformational changes; Microtubules; Cytoskeleton; Electron transfer; ATPase activation; Ciliary beating; Intracellular transport; Protozoan; *Euglena gracilis*; Vertebrate photoreceptors **39**, 187

Control; Dielectric spectroscopy; Biomass estimation; Cellular growth rate; Chaos; Non-linear prediction **39**, 43

Controllability; Complement; Sequential Activation; Stability; Optimization **39**, 173

Coordinate rotation of benchmark functions; Genetic algoritm performance; Theoretical and practical aspects **39**, 263

Cytoskeleton; Microtubules; Electron transfer; ATPase activation; Conformational changes; Ciliary beating; Intracellular transport; Protozoan; *Euglena gracilis*; Vertebrate photoreceptors **39**, 187

Degenerate recognition; Selective system; Self-organization; Competition; Computer modeling **39**, 143

Dielectric spectroscopy; Biomass estimation; Cellular growth rate; Chaos; Non-linear prediction; Control **39**, 43

Dis-inhibition; Temporal coding; Insect olfaction; Post-inhibitory rebound **39**, 241

Dissipative structures; Chaos; Biological rhythms; Oscillatory enzymes; Cell behavior **39**, 87

Electron transfer; Microtubules; Cytoskeleton; ATPase activation; Conformational changes; Ciliary beating; Intracellular transport; Protozoan; *Euglena gracilis*; Vertebrate photoreceptors **39**, 187

Endogenous AC fields; Microtubule; u^4 model; Kinklike excitations **39**, 127

Enzyme activity; Photoregulation; Thermoregulation **39**, 35

Euglena gracilis; Microtubules; Cytoskeleton; Electron transfer; ATPase activation; Conformational changes; Ciliary beating; Intracellular transport; Protozoan; Vertebrate photoreceptors **39**, 187

Evolution of metabolism; Biocomputers; Metabolic design; Sensitivity analysis **39**, 109

Evolutionarly stable strategies; Population dynamics; Coevolutionary dynamics; Stochastic games **39**, 93

Evolutionary algorithm; Model complexity; Model validation; Stacked generalization; Time series prediction; Recurrent neural network **39**, 3

Evolutionary algorithms; Fitness landscape; Representation problem **39**, 63

Fitness landscape; Evolutionary algorithms; Representation problem **39**, 63

Fractal dimension; Immune repertoire; Reactivity patterns; Linguistic analogy **39**, 19

Fractals; T-cell receptors; Zipf Law; Long-range interactions; Pattern recognition **39**, 77

Fractals; Zipf analysis; Immune repertoires; Scaling behavior **39**, 227

Genetic algorithm; Variable biome; Albedo and radiation effects; Greenhouse effect; Temperature balance **39**, 135

Genetic algoritm performance; Coordinate rotation of benchmark functions; Theoretical and practical aspects **39**, 263

Genetic code; Six dimensional Boolean hypercube; Molecular evolution; In vitro and in vivo **39**, 117

Greenhouse effect; Variable biome; Genetic algorithm; Albedo and radiation effects; Temperature balance **39**, 135

Idiotypic network; Random graph; Random matrix theory; Branching process; Subcritical reorganizations **39**, 25

Immune repertoire; Fractal dimension; Reactivity patterns; Linguistic analogy **39**, 19

Immune repertoires; Zipf analysis; Fractals; Scaling behavior **39**, 227

In vitro and in vivo; Genetic code; Six dimensional Boolean hypercube; Molecular evolution **39**, 117

Insect olfaction; Dis-inhibition; Temporal coding; Post-inhibitory rebound **39**, 241

Intracellular transport; Microtubules; Cytoskeleton; Electron transfer; ATPase activation; Conformational changes; Ciliary beating; Protozoan; *Euglena gracilis*; Vertebrate photoreceptors **39**, 187

K+ channels; Membrane potential; Calcium oscillations; Cell activation **39**, 233

Kinklike excitations; Microtubule; Endogenous AC fields; u^4 model **39**, 127

Limit cycles; Parasite-host interaction; Singular perturbation **39**, 251

Linguistic analogy; Immune repertoire; Fractal dimension; Reactivity patterns **39**, 19

Local stability; Non-living resource; Stability switching; Time lag **39**, 153

Long-range interactions; T-cell receptors; Zipf Law; Fractals; Pattern recognition **39**, 77

Membrane potential; Calcium oscillations; K+ channels; Cell activation **39**, 233

Metabolic design; Biocomputers; Evolution of metabolism; Sensitivity analysis **39**, 109

Microtubule; Endogenous AC fields; u^4 model; Kinklike excitations **39**, 127

Microtubules; Cytoskeleton; Electron transfer; ATPase activation; Conformational changes; Ciliary beating; Intracellular transport; Protozoan; *Euglena gracilis*; Vertebrate photoreceptors **39**, 187

Model complexity; Model validation; Stacked generalization; Time series prediction; Evolutionary algorithm; Recurrent neural network **39**, 3

Model validation; Model complexity; Stacked generalization; Time series prediction; Evolutionary algorithm; Recurrent neural network **39**, 3

Molecular evolution; Genetic code; Six dimensional Boolean hypercube; In vitro and in vivo **39**, 117

Non-linear prediction; Dielectric spectroscopy; Biomass estimation; Cellular growth rate; Chaos; Control **39**, 43

Non-living resource; Local stability; Stability switching; Time lag **39**, 153

Optimization; Complement; Sequential Activation; Stability; Controllability **39**, 173

Origin of life; Peptide antibiotics; Aminoacyl-tRNA synthetases; Antique evolutionary relationships; RNA world; Thioester world **39**, 159

Oscillatory enzymes; Chaos; Biological rhythms; Dissipative structures; Cell behavior **39**, 87

Parasite-host interaction; Singular perturbation; Limit cycles **39**, 251

Pattern recognition; T-cell receptors; Zipf Law; Long-range interactions; Fractals **39**, 77

Peptide antibiotics; Aminoacyl-tRNA synthetases; Antique evolutionary relationships; RNA world; Thioester world; Origin of life **39**, 159

Photoregulation; Enzyme activity; Thermoregulation **39**, 35

Population dynamics; Evolutionarly stable strategies; Coevolutionary dynamics; Stochastic games **39**, 93

Postinhibitory rebound; Dis-inhibition; Temporal coding; Insect olfaction **39**, 241

Protozoan; Microtubules; Cytoskeleton; Electron transfer; ATPase activation; Conformational changes; Ciliary beating; Intracellular transport; *Euglena gracilis*; Vertebrate photoreceptors **39**, 187

Random graph; Idiotypic network; Random matrix theory; Branching process; Subcritical reorganizations **39**, 25

Random matrix theory; Idiotypic network; Random graph; Branching process; Subcritical reorganizations **39**, 25

Reactivity patterns; Immune repertoire; Fractal dimension; Linguistic analogy **39**, 19

Recurrent neural network; Model complexity; Model validation; Stacked generalization; Time series prediction; Evolutionary algorithm **39**, 3

Representation problem; Evolutionary algorithms; Fitness landscape **39**, 63

RNA world; Peptide antibiotics; Aminoacyl-tRNA synthetases; Antique evolutionary relationships; Thioester world; Origin of life **39**, 159

Scaling behavior; Zipf analysis; Immune repertoires; Fractals **39**, 227

Selective system; Self-organization; Degenerate recognition; Competition; Computer modeling **39**, 143

Self-organization; Selective system; Degenerate recognition; Competition; Computer modeling **39**, 143

Sensitivity analysis; Biocomputers; Evolution of metabolism; Metabolic design **39**, 109

Sequential Activation; Complement; Stability; Controllability; Optimization **39**, 173

Singular perturbation; Parasite-host interaction; Limit cycles **39**, 251

Six dimensional Boolean hypercube; Genetic code; Molecular evolution; In vitro and in vivo **39**, 117

Stability; Complement; Sequential Activation; Controllability; Optimization **39**, 173

Stability switching; Non-living resource; Local stability; Time lag **39**, 153

Stacked generalization; Model complexity; Model validation; Time series prediction; Evolutionary algorithm; Recurrent neural network **39**, 3

Stochastic games; Evolutionarly stable strategies; Population dynamics; Coevolutionary dynamics **39**, 93

Subcritical reorganizations; Idiotypic network; Random graph; Random matrix theory; Branching process **39**, 25

T-cell receptors; Zipf Law; Long-range interactions; Fractals; Pattern recognition **39**, 77

Temperature balance; Variable biome; Genetic algorithm; Albedo and radiation effects; Greenhouse effect **39**, 135

Temporal coding; Dis-inhibition; Insect olfaction; Post-inhibitory rebound **39**, 241

Theoretical and practical aspects; Genetic algoritm performance; Coordinate rotation of benchmark functions **39**, 263

Thermoregulation; Enzyme activity; Photoregulation **39**, 35

Thioester world; Peptide antibiotics; Aminoacyl-tRNA synthetases; Antique evolutionary relationships; RNA world; Origin of life **39**, 159

Time lag; Non-living resource; Local stability; Stability switching **39**, 153

Time series prediction; Model complexity; Model validation; Stacked generalization; Evolutionary algorithm; Recurrent neural network **39**, 3

φ^4 model; Microtubule; Endogenous AC fields; Kinklike excitations **39**, 127

Variable biome; Genetic algorithm; Albedo and radiation effects; Greenhouse effect; Temperature balance **39**, 135

Vertebrate photoreceptors; Microtubules; Cytoskeleton; Electron transfer; ATPase activation; Conformational changes; Ciliary beating; Intracellular transport; Protozoan; *Euglena gracilis* **39**, 187

Zipf analysis; Immune repertoires; Fractals; Scaling behavior **39**, 227

Zipf Law; T-cell receptors; Long-range interactions; Fractals; Pattern recognition **39**, 77